



Industry Canada Industrie Canada

Original  
Publication

# INDUSTRY AND THE URUGUAY ROUND

**VOLUME 2**

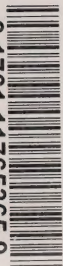
**Information Technologies**

**General Agreement on  
Trade in Services**

Canada

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# **INDUSTRY**

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# **AND THE**

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# **URUGUAY**

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# **ROUND**

## ***VOLUME* 2**

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**Information Technologies**

**General Agreement on  
Trade in Services**



This booklet is the second in a series of publications pertaining to *Industry and the Uruguay Round*. These booklets as well as many other Industry Canada documents are available electronically on the Internet computer network at [council@istc.ca](mailto:council@istc.ca).

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Cat. No. C2-263/2-1995E  
ISBN 0-662-23023-X  
105063-95-02

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## **Information Technologies**

Importance to Canada

Communications and Electronic Equipment

Computer Equipment and Business Machines


Electronic Instruments

Computer Services and Software

Communication Carriers Services

Table 1 — Value of Exports and Sample Foreign Tariff Rates on Selected  
Information Technologies Products

Table 2 — Value of Imports and Canadian Tariff Rates on Selected Information  
Technology Products



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# INFORMATION TECHNOLOGIES

## Importance to Canada

The information technologies sector includes manufacturers of equipment and associated parts for telecommunications and other communication devices, computers, office, store and business machines, and electronic instruments. Computer services and software and communication carriers services industries are also part of the information technologies sector.

This paper discusses the impact of the Uruguay Round multilateral trade negotiations on five segments of the information technologies industry:

- communications and electronic equipment
- computer equipment and business machines
- electronic instruments
- computer services and software
- communication carriers services.

The paper does not discuss the impact of the trade negotiations on the assemblers of television sets and telephone resellers, paging and cellular phones services.

In 1992, these five segments of the information technologies industry had about 13 550 establishments (excluding the communications carriers, where the number of establishments is not a meaningful indicator). They sold about \$36.1 billion worth of products and services and employed about 271 000 people. In that year, they exported more than \$10.5 billion worth of products and services. Canadian imports of similar products and services were in excess of \$17.8 billion. These segments are a major source of innovation in Canada, accounting for 35 percent of all industrial research and development (R&D). They feature clusters of technological excellence across the country.

Four of the above five segments of the information technologies industry are concentrated in Ontario and Quebec, which account for approximately 80 percent of sales. Most of the remaining sales originate in Alberta and British Columbia. The communication carriers services segment of the industry has a significant presence in all provinces, and sales are distributed in accordance with population.

## Communications and Electronic Equipment

This segment of the industry comprises manufacturers of communications and electronic equipment used for the transmission, switching, and distribution of voice, numerical and video information. These include networking and multiplexing equipment, customer premises (telephones) and multimedia equipment, personal communications and wireless technologies, fibre optic transmission and satellite communications systems, printed circuit boards, and customized microelectronic chips.



## Strengths and Weaknesses

The Canadian industry is composed of one large, vertically integrated, R&D-based company — Northern Telecom — a few smaller Canadian-owned companies, several subsidiaries of multinational enterprises (MNEs) and a number of smaller specialty firms. In 1992, the industry had 602 establishments, which employed 57 600 people. Shipments of manufactured goods were worth \$8.0 billion, of which only 32 percent went to the domestic market.

Over the six-year period ending in 1992, industry shipments grew at an average annual rate of 7 percent.

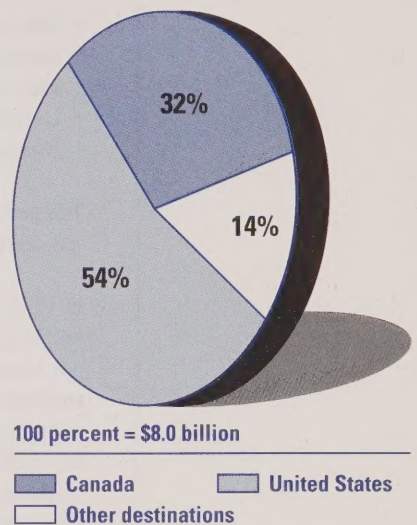
The communications and electronic equipment sector's strengths are its technology base, the presence of Northern Telecom and the sophistication of the domestic market. These are complemented by space programs that have emphasized communications. Countering these strengths is the absence of many of the other key world players from, and the small size of, the Canadian market.

Communications equipment manufacturing is a high-technology activity, requiring enormous investments in R&D. The major international firms all have strong R&D capabilities, including the ability to design and fabricate integrated circuits. According to a survey conducted by the Organisation for Economic Co-operation and Development, Canadian companies' R&D expenditures averaged 12.6 percent of sales, ranging from a low of 5 percent to a high of 21.2 percent. This segment of the information technologies industry accounts for 20 percent of all industrial R&D done in Canada.

The presence in Canada of Northern Telecom, a multinational with a broad portfolio and the third largest global telecommunications equipment supplier in terms of annual revenues, has been a significant strength for this industry. It has given Canada recognition as an important contributor to the industry's swiftly changing technological development. In addition, it has provided a steady and continuing market for suppliers of parts and components. Many of the other Canadian telecommunications manufacturers began as suppliers to Northern Telecom.

The Canadian market is one of the most developed in the world. The stability of the domestic market, its sophisticated and diverse nature, and the willingness of the industry to innovate have contributed significantly to the development of the Canadian communications supply structure. In addition, long-term business relationships between communications services

**Figure 1**  
**Communications and Electronic Equipment,**  
**Destination of Shipments, 1992**





## Trade Patterns and Performance

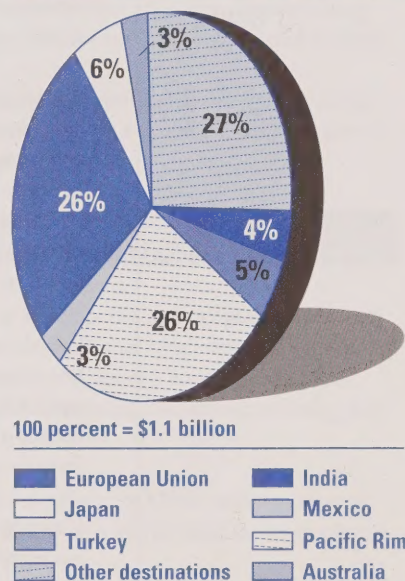
companies and the leading equipment suppliers have provided the latter with the financial strength to pay for growing investment in product development and the track record to convince potential customers of the quality of Canadian products. On the other hand, the Canadian market is not large, and the success of a few companies in achieving substantial market penetration has made it difficult for other manufacturers.

The strengths of the small and medium-sized enterprises in the Canadian communications equipment industry reside in the technological excellence of their products and their ability to identify and fill market niches. The dependence on niche markets provides the industry with disjointed capabilities, which have been detrimental to its ability to compete with more integrated manufacturers from other countries in developing-country markets. The Canadian industry as a whole has strengths in systems integration capability, and some of them have undertaken prime contractor responsibility for major offshore systems projects.

Trade is the lifeblood of the Canadian communications and electronic equipment industry, and ensures the availability of world-class equipment at the best-available price to Canadians. The industry is a major exporter of digital switching systems, data communications products, personal communications and wireless technologies, fibre optic transmission systems and satellite communication systems.

The value of exports doubled between 1988 and 1992. In 1992, the industry exported to the United States \$4.3 billion worth of communications equipment and electronic parts, which amounted to 54 percent of the value of all its shipments. The portion exported to non-U.S. countries amounted to \$1.1 billion, or 14 percent of total shipments. Of this amount, the principal foreign markets were the European Union (EU), which accounted for 26 percent of Canadian exports to non-U.S. destinations, and a number of Pacific Rim countries — China, Singapore, Hong Kong, the Republic of Korea, Taiwan, Malaysia, Indonesia, Philippines and Thailand — which accounted for the same amount. Other important destinations included Japan, Mexico, India, Australia and Turkey. Rapid growth throughout the Pacific Rim countries is expected to continue into the next century.

**Figure 2**  
**Communications and Electronic Equipment,**  
**Exports to non-U.S. Destinations, 1992**





## Impact of the GATT Uruguay Round

Generally, U.S. tariff levels on communications and electronic equipment have fallen to zero under the Canada-U.S. Free Trade Agreement. The EU's tariffs currently range from zero to 14.0 percent. Japanese tariffs are from zero to 7.2 percent.

Finally, some Republic of Korea tariffs are as high as 20.0 percent, which that country has bound (i.e. undertaken not to increase), while others are simply unbound.

Non-tariff measures are also very important in restricting access to foreign markets. A prominent non-tariff measure has been government procurement policies. Because telecommunications is not a subject covered in the terms of the General Agreement on Tariffs and Trade (GATT) Government Procurement Code, government-owned telecommunications operators, which dominate the sector in many foreign countries, favour local suppliers over those from other countries.

The activities of international standards-setting bodies are becoming increasingly relevant to trade in communications and electronic equipment. Where standards were once used to protect national markets from foreign competitors, they are now being used by the major competitors as tools to gain competitive advantage over each other in major regional or world markets. National standards now need to be consistent with international standards in order for users to obtain the full benefits of modern technology.

The Uruguay Round multilateral trade negotiations will have a major positive impact on Canada's communications and electronic equipment sector. It will provide firms with business opportunities in both new and traditional markets, and will help firms diversify beyond the lucrative U.S. market.

Canada's major trading partners will eliminate their tariffs on a number of communications and electronic equipment or significantly reduce them in five annual, equal steps. The EU will eliminate its tariffs on telephone sets and some digital integrated circuits. It will reduce its tariffs by up to 60 percent on others. Japan will eliminate all of its tariffs on communications and electronic equipment. For its part, the Republic of Korea has agreed to bind (i.e. not to increase) most of its tariffs, to eliminate its tariff on integrated circuits and to reduce its tariffs on others by up to 35 percent.

Canada's other important trading partners will provide equipment manufacturers with more secure access to their markets. The more advanced developing countries (e.g. Brazil, Malaysia and Thailand) have bound and will be reducing their tariffs over the stated period. Most of the less-advanced developing countries have bound their tariffs. This will encourage Canadian firms to consider commercial opportunities in a number of developing countries.

Under the General Agreement on Trade in Services (GATS), Canada's trading partners without exception have agreed to allow entry of Canadian firms' specialized employees on a project or contract basis. This will greatly assist companies in pursuing and carrying out projects for the provision of telecommunications equipment.

The Agreement on Government Procurement does not as yet include telecommunications equipment. This will limit somewhat the potential benefits to be derived from the elimination or reduction of foreign tariffs in countries where telecommunications operators are government-owned. The major participants, however, have agreed to resume the procurement agreement negotiations with a view to including telecommunications equipment when the new Agreement on Government Procurement comes into force on January 1, 1996.

Canadian tariffs on telephone equipment, such as switches, will be reduced by 50 percent. In addition, many of Canada's tariffs on other communications and electronic equipment will be eliminated once these products are successfully included in the Agreement on Government Procurement. This will reduce the manufacturing cost of Canadian equipment and help make Canadian products more competitive on international markets.

The Agreement on Technical Barriers to Trade will encourage countries to use international standards. It will reduce the possibility that technical regulations and standards, as well as testing and certification procedures, will create unnecessary obstacles to trade. The improved trade disciplines will provide greater assurance that foreign technical regulations and standards do not unduly deny access to Canada's communications and electronic equipment.

The Agreement on Subsidies and Countervailing Measures will exclude, under certain conditions, subsidies granted for research and pre-competitive development purposes as an issue for possible trade challenges by our trading partners. The agreement will provide Canadian companies with the means to take actions against subsidies of communications and electronic equipment that displace Canadian equipment in foreign markets, including the subsidizing country's domestic market. This will facilitate foreign markets penetration by Canadian firms.

The Agreement on Trade-Related Aspects of Intellectual Property Rights will provide manufacturers of integrated circuits with significant protection of layout designs. This will encourage Canadian firms to explore and develop new markets.

## **Computer Equipment and Business Machines**

This segment of the industry includes manufacturers of computers and peripheral equipment and business machines, such as terminals, mainframe and personal computers, bank machines and cash registers. It also includes computer input or output devices, memory and central processing units and associated parts, electronic facsimile, copying, calculating, weighing and vending machines.

This segment of the industry is composed of several subsidiaries of MNEs and a number of small and medium-sized companies. In 1992, the industry had 206 establishments employing





## Strengths and Weaknesses

15 800 people and shipped \$4.1 billion worth of manufactured goods. Canada accounted for only 14 percent of these shipments.

Over the six-year period ending in 1992, industry shipments grew at an average annual rate of 9 percent.

The strengths of the Canadian computer equipment and business machine industry rest on the proximity to major markets and suppliers, as well as the cost, quality and availability of a skilled work force.

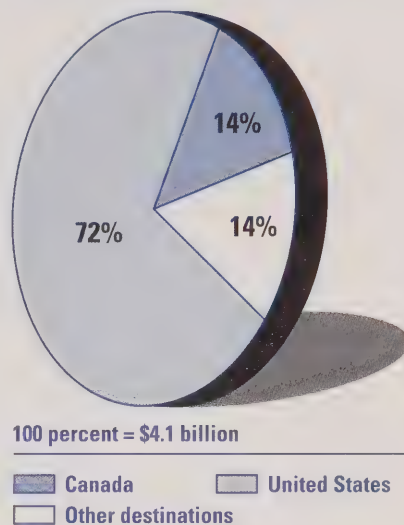
The movement toward reduced-instruction-set chips has resulted in expanding opportunities for Canadian companies, which are customarily smaller than MNEs and which have traditionally served niche markets. It has also resulted in the formation of some unusual marketing and production alliances among major firms that historically have been rivals.

The Canadian industry has evolved into two types of firms. The first group is composed of large multinational companies that have a considerable degree of vertical integration, in-house R&D facilities, an efficient production operation and an effective sales force. The second group of firms is smaller, is generally Canadian-owned, and frequently designs and builds parts that enhance a specific input or output function of a microprocessor, such as imaging, audio, facsimile or controllers for other peripherals. They become successful precisely because they are fast followers and can quickly supply markets that the larger companies ignore. The majority of Canadian-owned firms are in this group.

Most MNEs conduct R&D in Canada on a product mandate basis. Smaller Canadian firms regularly invest well over 10 percent of sales in R&D. Their R&D normally consists of the development of new semiconductor circuitry and system level design.

Canada's advantages are location and a well-educated work force. Because of its proximity to the industry's largest market, the United States, transportation time and cost on bulkier items are reduced, and communications between headquarters and subsidiaries are easier. Related to this are similarities in culture and business practices and ease of communication. Canada's work force is skilled and experienced in high technology, and its wages and costs are competitive with those in the United States and Europe. Canada's post-secondary education system, which features many excellent programs in mathematics, computer science and engineering, has often been cited as a major factor in attracting computer MNEs to Canada.

**Figure 3**  
**Computer Equipment and Business Machines, Destination of Shipments, 1992**

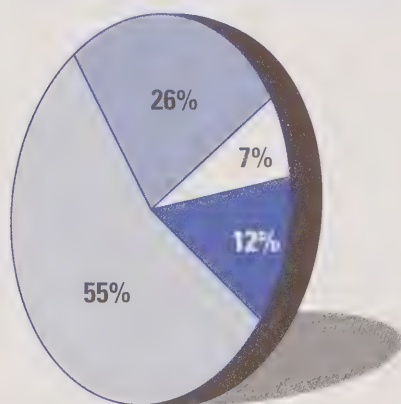


## Trade Patterns and Performance

The industry is, however, at a competitive disadvantage compared with Japanese and other Far Eastern firms, which have access to low-cost capital from within their highly integrated corporate families. These firms, along with U.S. firms, have established a strong market presence and are industry leaders. Canadian firms must seek their financing in the open market.

Trade is vital to the Canadian computer equipment and business machine industry. The industry is a major exporter of computer parts and accessories.

**Figure 4**  
**Computer Equipment and Business Machines,**  
**Exports to non-U.S. Destinations, 1992**



100 percent = \$560 million

European Union	Pacific Rim
Other destinations	Japan

Canadian exports grew at an average of about 9 percent annually between 1988 and 1992. In 1992, the industry exported to the United States \$2.9 billion worth of computer and business machine equipment, or almost 72 percent of all its shipments. The portion exported to non-U.S. countries amounted to \$560 million, or 14 percent of total shipments. Of the amount going to non-U.S. destinations, the principal foreign markets were the EU (55 percent), Japan (12 percent) and the Pacific Rim countries (7 percent).

U.S. tariffs on computer equipment and business machines have fallen to zero under the Canada-U.S. Free Trade Agreement. Most of the EU's tariff rates are around 4.9 percent. While the Japanese tariffs are at zero on medium and large computers, they are as high as 6.0 percent on other computers and computer parts and business machines. Most Republic of Korea tariffs are at 20.0 percent, while the tariff on digital processing units is unbound.

Procurement policies and large government-funded R&D programs are frequently used by countries to nurture their domestic computer industries. (National governments are often the largest single purchasers of computer equipment within their own borders.) For instance, governments use these procurement incentives as an inducement for local investment by MNEs.

As the world moves toward a global economy, users are insisting that computers and communications equipment be able to interact and "communicate" with each other, no matter where they are being operated, who manufactured them, or how many communication companies transmit the signal. These demands can be met only if the companies involved agree to meet and adhere to international standards. This trend toward "convergence" may have a significant impact on the computer equipment and business machines sector.



## Impact of the GATT Uruguay Round

The Uruguay Round multilateral trade negotiations will have a significant positive impact on Canada's computer equipment and business machines sector. It will provide firms with business opportunities in both new and traditional markets. It will help firms diversify beyond the large U.S. market.

Canada's major trading partners will eliminate their tariffs on a number of computer equipment and business machines or significantly reduce them in five annual, equal steps. The EU will eliminate its tariffs on all input, output and storage units and some data processing machines, digital processing units and computer parts. When the results are fully implemented, its tariffs on computer equipment and business machines will not exceed 2.5 percent, a reduction of 50 percent. Japan will eliminate all of its tariffs on computer equipment and business machines. For its part, the Republic of Korea has agreed to bind most of its tariffs and to eliminate its tariff on data storage units and on some input and output units. It will reduce its tariffs by up to 35 percent on other products.

Canada's other important trading partners will provide manufacturers with more secured access to their markets. The more-advanced developing countries (e.g. Brazil, Malaysia and Thailand) have bound and will be reducing their tariffs over the stated period. Most of the less-advanced developing countries have bound their tariffs. This will provide Canadian firms with an incentive to explore those markets.

The Agreement on Government Procurement will improve access to foreign governments' purchases of computer equipment. The new bid challenge mechanism will allow private sector companies to take action to preserve their business opportunities. Further, the new agreement will preclude participating governments from requiring industrial offsets (i.e. requirements from suppliers or service providers to establish a business or to manufacture or produce locally a specified value) as a condition for the purchase of equipment or services.

The Agreement on Technical Barriers to Trade will encourage countries to use international standards. It will reduce the possibility that technical regulations and standards, as well as testing and certification procedures, will create unnecessary obstacles to trade.

Canada's tariffs on computers and business machines will be eliminated. This will reduce the manufacturing cost of Canadian equipment and help make Canadian products more competitive on international markets.

## Electronic Instruments

This segment of the industry comprises manufacturers of electronic indicating, recording, controlling and navigating instruments and electronic medical, avionic and measuring instruments.



## Strengths and Weaknesses

The electronic instruments industry is composed of two large firms, many subsidiaries of MNEs, about 50 medium-sized, highly specialized firms and a number of small companies. In 1992, the industry had 400 establishments, which employed 17 700 people and shipped \$2.4 billion worth of manufactured goods. Canada accounted for about 59 percent of all shipments.

Over the six-year period ending in 1992, industry shipments grew at an average annual rate of approximately 4 percent.

The factors affecting the competitiveness of electronic instruments companies include the quality of technology embodied in the products, the availability of trained personnel, managerial competence, capital and the ability of the firm to operate internationally.

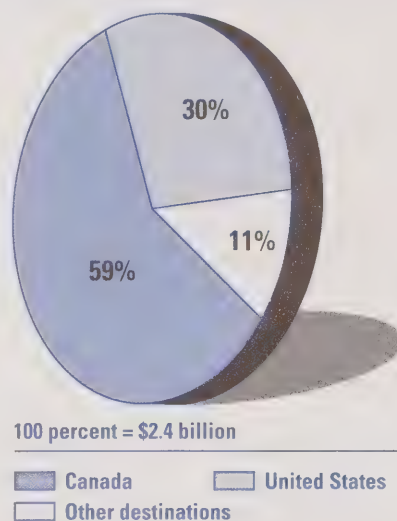
Large, foreign-owned firms have access to the resources of their parent companies and have an established reputation for reliability. They tend to be production-oriented, with new product development seen as part of an overall corporate strategy. The Canadian R&D budgets of these large subsidiaries are small (1.7 percent of sales) in comparison with those of Canadian-owned firms (15.2 percent of sales).

In many cases, the foreign parent organization establishes the product development activities of its Canadian subsidiary. Its performance is judged in the context of an overall corporate setting by cost effectiveness, ability to meet production deadlines and general performance as a profit centre.

The competitiveness of smaller, independent electronic instruments companies is most affected by the performance criteria of the technology they offer, the availability of specialized expertise and, most importantly, the quality and decision-making ability of the firm's management. Attracting talented personnel is more difficult for a small firm, particularly if it is situated in an area that has few industries using advanced technology.

Innovation and the development of new products and new markets are of fundamental interest to small firms. Small companies can more quickly exploit opportunities and market niches too narrow to be of interest to the major firms. However, small firms often lack the financial and physical resources to undertake large projects, and are more likely to have most success with smaller, special or custom orders. In these situations, competition is on the basis of

**Figure 5**  
**Electronic Instruments,**  
**Destination of Shipments, 1992**





## Trade Patterns and Performance

service and quality of the product. It is a niche market that an innovative foreign supplier can quickly exploit.

The rate of change in the industry has been high in the past, and the pace of innovation is accelerating. The trend toward integrating instrumentation systems with communications networks at manufacturing and production sites as well as in commercial settings is increasing.

The largest impediment to growth in the industry is the slow rate of acceptance and application of advanced manufacturing technology (AMT) instrumentation products by potential users worldwide. Canadian manufacturers, particularly small and medium-sized firms, are moving slowly toward the adoption of AMT.

Traditional purchasing habits of the larger client companies are also changing. Buyers are developing longer-term relationships with a few select suppliers. They are expecting these suppliers to share the risks of the buyers' own product development and quality improvement schemes.

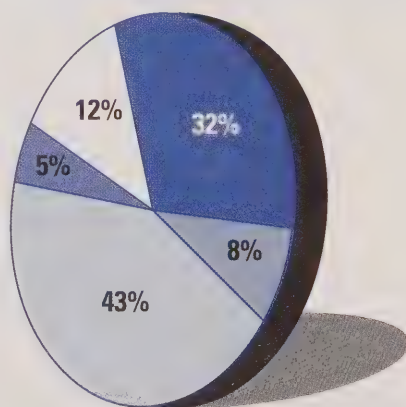
Foreign trade is a very important part of the business of the Canadian electronic instruments industry. The industry is a major exporter of automatic regulating and control instruments, direction finding and navigating instruments, survey equipment and meters for electrical applications.

The value of exports grew at an average annual rate of 8 percent between 1988 and 1992. In 1992, the industry exported to the United States \$730 million worth of electronic instruments, or 30 percent of all its shipments. The portion exported to non-U.S. countries amounted to \$260 million, or 11 percent of total shipments. Of the amount going to non-U.S. destinations, the principal foreign markets were the EU (43 percent), Japan (8 percent), China (5 percent) and other Pacific Rim countries (12 percent).

U.S. tariffs on electronic instruments vary from zero to about 4 percent. All U.S. tariffs will be at zero on January 1, 1998, once the Canada-U.S. Free Trade Agreement is fully implemented. Most of the EU's tariffs are around 7.2 percent and some are at 11.0 percent, while Japanese tariffs range from zero to 4.9 percent. The Republic of Korea tariffs are at 20 percent.

National standards have been fragmenting the international market.

**Figure 6**  
**Electronic Instruments,**  
**Exports to non-U.S. Destinations, 1992**



100 percent = \$260 million

European Union	Other destinations
China	Japan
Other Pacific Rim	

## Impact of the GATT Uruguay Round

The Uruguay Round multilateral trade negotiations will have a positive impact on Canada's electronic instruments sector. It will provide firms with business opportunities in both new and traditional markets. It will help firms diversify into overseas markets both through trade and new investment opportunities.

Canada's major trading partners will eliminate their tariffs on electronic instruments or significantly reduce them in five annual, equal steps. The EU will reduce its tariffs on electronic instruments by a minimum of 49 percent to a maximum of 62 percent; as a result, its tariffs will not exceed 4.2 percent. Japan will eliminate all of its tariffs on electronic instruments. For its part, the Republic of Korea has agreed to bind all of its tariffs and reduce its tariffs by a minimum of 35 percent and a maximum of 60 percent on products within this sector.

Canada's other important trading partners will provide manufacturers with more secure access to their markets. The more-advanced developing countries (e.g. Brazil, Malaysia and Thailand) have bound and will be reducing their tariffs over the stated period. Most of the less-advanced developing countries have bound their tariffs.

Canada's tariffs on electronic instruments will be lowered by up to 60 percent. This will reduce the manufacturing cost of Canadian equipment and will help make Canadian products more competitive on international markets.

The Agreement on Technical Barriers to Trade will encourage countries to use international standards. It will reduce the possibility that technical regulations and standards, as well as testing and certification procedures, will create unnecessary obstacles to trade. This will improve Canadian firms' access to foreign markets.

### Computer Services and Software

This segment of the industry is composed of businesses engaged primarily in the provision of computer consulting, processing, programming, software services, software packages, systems analysis and design, leasing, maintenance and repair of computer equipment.

The Canadian industry is composed of about 20 large well-established firms and thousands of small firms. The larger firms — SHL Systemhouse, the DMR Group, Cognos and Corel — are principally Canadian-owned. They manage or integrate systems for large organizations or produce software for international markets. In 1992, the industry had 12 340 establishments, which employed 61 600 people and earned revenues of \$6.1 billion from computer services and software shipments.

Over the six-year period ending in 1992, industry revenues grew at an average annual rate of 9 percent. The computer services and software segment has the highest sustained growth rate of all Canadian industries.





## Strengths and Weaknesses

The multitude of small firms in the Canadian computer services and software segment experience the management problems typical of other small businesses. Many firms are led by founders who often lack the management skills, depth of business experience and capital necessary to develop a strong commercial image, a convincing business plan and other keys to business success. Moreover, the strategic nature and the rapid rate of change of the technologies present these firms with certain management challenges that do not normally confront other domestically oriented small businesses.

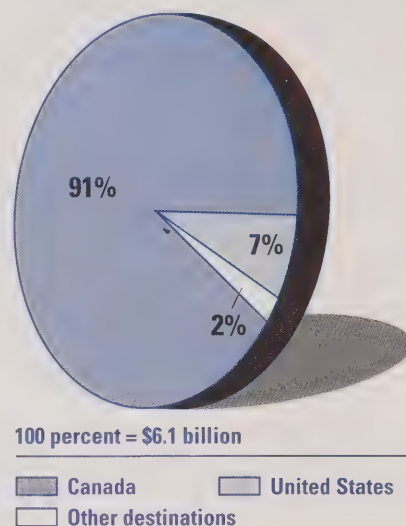
The industry must attract and nurture the best and most experienced senior managers available. However, in a relatively young industry with few successful Canadian companies of sufficient stature to develop a talented management base, the required talent is in short supply.

Effective marketing significantly affects the ability of firms to compete. Despite the proximity of the United States, which has the largest software market in the world, many Canadian firms find it difficult to establish a presence there. Canadian companies often lack the skills and resources to get their products to this market. Marketing techniques used by Canadian smaller firms have not measured up to those of their U.S. competitors. Moreover, Canadian firms have not generally forged strong marketing alliances with computer hardware firms. A lengthy sales process and the need to provide product modifications, after-sales services and client training add complexity to the marketing activities in this industry. Canadian firms that have developed strong positions in highly competitive international markets have effective marketing and distribution mechanisms in place. They also demonstrate a clear understanding of the markets they serve.

The increasing shortage of experienced computer professionals is a cause for concern. Along with other leading industrialized nations, Canada has experienced a significant decline in post-secondary enrolment in computer science and associated fields. An adequate future supply of trained technical and managerial personnel is essential to sustaining the competitiveness of the Canadian computer services and software segment of the information technologies industry.

R&D activities of the industry play an important role in maintaining competitiveness. Fierce competition among the top software firms has significantly shortened product life cycles.

**Figure 7**  
**Computer Services and Software,**  
**Destination of Services, 1992**



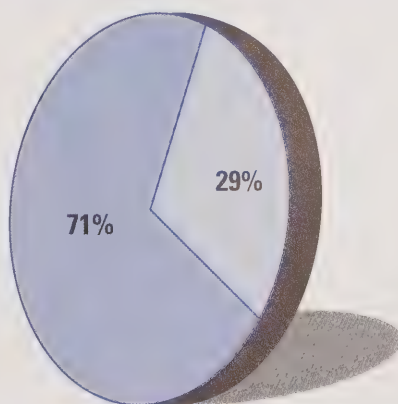
## Trade Patterns and Performance

Canadian software firms spent about 16 percent of their revenues on R&D, although the average for the segment as a whole is between 4.6 and 5.7 percent.

Companies may experience great difficulty in securing adequate financing from financial institutions or venture capital firms. They face all of the challenges encountered by technology-based companies: growing competition, increased corporate concentration, the need to finance major R&D activities on a continuing basis, fast-paced, rapidly changing markets that require decisions, and products that need to be developed quickly.

Trade has been increasingly important to the computer service and software industry; it is a sine qua non for the development of an internationally competitive industry. International trade in computer services and software is growing faster than that in goods in general. The industry is a major exporter of systems integration services and software packages.

**Figure 8**  
**Computer Services and Software,**  
**Foreign Revenues excluding**  
**United States, 1991**



100 percent = \$137 million

■ European Union    ■ Other countries

Foreign revenue grew at an impressive average annual rate of 26 percent between 1986 and 1991. In 1991 (the latest year for which information is available), conservative estimates put the value of computer services and software sold to the United States at about \$434 million, or 7 percent of total sales. The portion exported to non-U.S. countries amounted to \$137 million, or 2 percent of total shipments. Of the amount going to non-U.S. destinations, the principal foreign market was the EU (71 percent), with the balance distributed across the rest of the world. Canadian computer services and software companies are making alliances and sales agreements with partners in Asia. In the future, the Pacific Rim countries are expected to become increasingly important markets.

There are no tariff barriers to trade in computer services and software. However, there are significant non-tariff measures on those services. The most important of these include

restrictions on labour mobility, international data transfer regulations, government procurement practices, standards and, in some foreign markets, the lack of intellectual property protection.

Intellectual property protection against software piracy has become an important trade-related issue. Inadequate intellectual property protection is often cited as a reason not to pursue certain markets in Asia.



## Impact of the GATT Uruguay Round

As more international trade in goods and services takes place electronically, the need increases for unencumbered flows of data, voice and video signals. The availability and price of these transborder data flows are of growing importance to the services exporters who distribute their products and provide services by means of advanced international telecommunications networks. There is a need for clear trade rules on subsidies and for non-discriminatory access to basic telecommunications services.

The Uruguay Round multilateral trade negotiations will have a major positive impact on Canada's computer services and software segment. It will provide firms with business opportunities in new markets as well as in traditional markets. It will help firms diversify beyond the lucrative U.S. market.

Canada's trading partners, without exceptions, will allow entry, on a project or contract basis, of Canadian firms' specialized employees. This will greatly assist companies in the pursuit and carrying out of projects for the provision of computer services and software.

The Agreement on Government Procurement will improve access to foreign governments' purchases of computer services and software. The new bid challenge mechanism will allow private sector companies to take action to preserve their business opportunities.

The Agreement on Technical Barriers to Trade will encourage countries to use international standards. It will reduce the possibility that technical regulations and standards, as well as testing and certification procedures, will create unnecessary obstacles to trade. The improved trade disciplines will provide greater assurance that foreign technical regulations and standards do not unduly deny access to Canadian computer services and software.

The Agreement on Trade-Related Aspects of Intellectual Property Rights will afford significant protection to Canadian firms' intellectual properties in foreign markets. In particular, it ensures that computer programs, including software, will be protected as literary works. The agreement will require countries to enforce copyrights and trademarks against counterfeiting and piracy. It will encourage Canadian firms to pursue market opportunities in countries where, until now, some firms refused to exploit business opportunities.

## Communication Carriers Services

This segment of the information technologies industry comprises firms engaged in the provision of local, long-distance and overseas telephone services, data and digital transmission services by wire, cable microwave, satellite and cable TV services. The Canadian Radio-television and Telecommunications Commission (CRTC) has regulatory authority over the broadcasting companies that constitute the Canadian broadcasting system and also federally regulated telecommunications carriers.



## Strengths and Weaknesses

There are large telephone companies operating in each of the 10 provinces. Cable TV is either a monopoly or local duopoly. Satellite communications are provided by Telesat Canada, and are owned by an alliance of telecommunications carriers. There is a cross-country microwave system, and cellular networks are located in metropolitan areas. Communication carriers, with minor exceptions, are Canadian-owned. In 1992, the industry had 118 000 employees and earned revenues of \$15.5 billion. The number of establishments for this segment of the industry is not a meaningful indicator.

Over the six-year period ending in 1992, industry revenues grew at an average annual rate of 4.5 percent.

Canada has one of the best communications infrastructures in the world and is well placed to take advantage of the development of the global Information Highway. Over 95 percent of Canadian households have a telephone connection, while 75 percent have a cable TV connection. For both networks, the conventional markets are saturated, and future growth will be limited to the growth in the population (i.e. less than 1 percent a year). The firms are therefore looking for new opportunities to generate revenues.

The integration of digital and computer technology will provide growth opportunities for many segments of the telephone and cable TV markets. This will accelerate the merging of the two networks.

There are no data on foreign revenues derived from the provision of telephone services. Cable TV services do not currently generate foreign revenues.

However, as more international trade in services takes place electronically, the need increases for unencumbered flows of data, voice and video signals. The availability and price of data flows are of growing importance to services exporters who distribute their products and provide services by means of telecommunications networks. Thus, industry rates have a considerable impact on the competitiveness of companies using the communications services. Domestic telephone service rates for both local and long-distance usage by business and residential users compare favourably with those of most other countries. Data communication rates are also reasonable, except for broadband rates, which can be three times those in the United States.

## Impact of the GATT Uruguay Round

The GATS will provide rules to govern trade in communications services. It establishes minimum standards of regulatory practices in this sector. The trade disciplines will require national governments to provide Canadian companies with access to and the use of public telecommunications networks and services on a non-discriminatory basis (i.e. foreign firms will have access on the same terms and conditions as national companies). This will provide Canadian services firms with substantial business opportunities abroad.



**Table 1**  
**Value of Exports and Sample Foreign Tariff Rates on Selected**  
**Information Technologies Products,**  
**Before and After Implementation of the World Trade Organization**

HS Code	Product Description (major products)	Value of Exports	European Union Tariff Rates		Japan Tariff Rates		Republic of Korea Tariff Rates	
			Before	After	Before	After	Before	After
		(\$ millions)	(percent)					
<b>Communications and electronic equipment:</b>								
851710	telephone sets	180	7.5	0.0	0.0	0.0	unbound	unbound
851730	telephone switches, line	1 171	4.6-7.5	3.6	0.0	0.0	10.0-20.0	13.0
851740	system equipment							
851790	and parts							
852510	radio transmitters/	312	0.0-6.5	0.0-6.5	0.0	0.0	20.0	13.0
852520	transceivers							
880520	aircraft flight simulators	317	0.0-3.8	0.0-1.7	7.2	0.0	0.0-5.0	0.0-5.0
853400	printed circuits	572	6.2	4.5	0.0	0.0	unbound	unbound
854211	digital monolithic integrated circuits	2 010	9.0-14.0	0.0-14.0	4.2	0.0	20.0	0.0
Total: All communications equipment		5 363						
<b>Computers and business machines:</b>								
847110	complete data processing	331	0.0-4.9	0.0-2.5	4.2-4.9	0.0	20.0	13.0
847120	machines, analog/digital/							
847199	hybrid							
847191	digital processing units (cpus)	603	0.0-4.9	0.0-2.5	4.9	0.0	unbound	unbound
847192	input/output units w-w/o cpu, storage	213	0.0-4.9	0.0	6.0	0.0	20.0	0.0-4.0
847193	data storage units w-w/o rest of system	171	0.0-4.9	0.0	6.0	0.0	20.0	0.0
847330	parts/accessories for computers	1 898	4.0	0.0-2.0	4.2-4.9	0.0	20.0	13.0-20.0
Total: All computers and business machines		3 504						

Table 1 (continued)

**Value of Exports and Sample Foreign Tariff Rates on Selected Information Technologies Products,  
Before and After Implementation of the World Trade Organization**

HS Code	Product Description (major products)	Value of Exports	European Union Tariff Rates		Japan Tariff Rates		Republic of Korea Tariff Rates	
			Before	After	Before	After	Before	After
		(\$ millions)	(percent)					
<b>Electronic instruments:</b>								
903289	automatic control	226	0.0-7.2	0.0-2.8	0.0	0.0	20.0	8.0
903290	instruments and parts							
903039	measure or test	122	0.0-11.0	0.0-4.2	0.0-4.9	0.0	20.0	13.0
903040	instruments or parts							
903090	electrical properties and telecom use							
902610	fluid flow or pressure	73	0.0-7.2	0.0-3.2	0.0-4.9	0.0	20.0	8.0
902620	measuring							
902680								
902690								
901410	navigating instruments	94	0.0-7.2	0.0-3.7	0.0-4.8	0.0	20.0	13.0
901420								
901480								
901490								
901540	survey, geophysical	29	5.6-7.2	2.7-3.7	0.0-4.8	0.0	20.0	13.0
901580	instruments							
901590								
Total: All electronic instruments		960						





**Table 2**  
**Value of Imports and Canadian Tariff Rates on Selected Information Technologies Products**  
**Before and After Implementation of the World Trade Organization**

HS Code	Product Description (major products)	Value of Imports	Canada Tariff Rates	
			Before	After
		(\$ millions)	(percent)	
<b>Communications and electronic equipment:</b>				
851710	telephone sets and answering machines	258	17.5	0.0
852020				
851730	telephone switches, line system equipment	605	0.0–17.6	0.0–8.7
851740	and parts			
851790				
851782	facsimile machines	113	10.2	0.0
851740	modems and parts	153	3.9–17.5	0.0
852510	radio transmitters/transceivers	361	9.2–9.5	0.0
852520				
880520	aircraft flight simulators	82	0.0	0.0
853400	printed circuits	763	10.3	0.0
854211	digital monolithic integrated circuits	3 303	4.0	0.0
Total: All communications equipment		7 806		
<b>Computers and business machines:</b>				
847110	complete data processing machines,	428	0.0–3.9	0.0
847120	analog/digital/hybrid			
847199				
847191	digital processing units (cpus)	1 599	3.9	0.0
847192	input/output units w-w/o cpu, storage	1 510	0.0–3.9	0.0
847193	data storage units w-w/o rest of system	1 120	0.0–3.9	0.0
847330	parts/accessories for computers	2 083	0.0–3.9	0.0
Total: All computers and business machines		7 690		

**Table 2 (continued)**

**Value of Imports and Canadian Tariff Rates on Selected Information Technologies Products**  
**Before and After Implementation of the World Trade Organization**

HS Code	Product Description (major products)	Value of Imports	Canada Tariff Rates	
			Before	After
		(\$ millions)	(percent)	
Electronic instruments:				
903289 903290	automatic control instruments and parts	580	0.0–9.2	0.0–6.2
903039 903040 903090	measure or test instruments or parts electrical properties and telecom use	201	0.0–10.3	0.0–5.1
902610 902620 902680 902690	fluid flow or pressure measuring	180	0.0–10.3	0.0–4.0
901410 901420 901480 901490	navigating instruments	152	0.0–10.3	0.0–6.8
901540 901580 901590	survey, geophysical instruments	107	0.0–10.3	0.0–6.8
Total: All electronic instruments		2 279		





# **General Agreement on Trade in Services (GATS)**

What Is Trade in Services?

How GATS Works

Key GATS Provisions

Annexes

Summary of Commitments

What Remains to Be Done?

How Does Canada Benefit?



# GENERAL AGREEMENT ON TRADE IN SERVICES (GATS)

Canada as a medium-sized economy is highly dependent on trade and has important export interests in the world trade in services, which is valued in the billions of dollars. Indeed, Canada is less dependent on the United States as a market for its export trade in services than for trade in goods. Therefore, it has been at the forefront of countries advocating international rules to prevent services from becoming another protectionist battlefield.

This section explains what a new General Agreement on Trade in Services (GATS) proposes and what it will mean for Canadian business.

## What Is Trade in Services?

Services are intangible non-goods, sometimes called invisibles. They may be traded:

- via people (e.g. professional services or consulting)
- via investment (e.g. a commercial presence that takes the form of a subsidiary, a branch or an agency)
- electronically (e.g. telecommunications, online information services, financial services or broadcasting).

However, services are often traded in tangible form, embodied in goods, for example, air transportation, computer software, video cassettes, stocks, bonds or insurance policies.

Services such as transportation, telecommunications and insurance are essential for trade in goods.

Trade in services accounted for some \$1.3 trillion worth of business worldwide in 1992. Canada's share of this trade was about \$25 billion in exports. Services are the fastest-growing segment of world trade. In Canada, trade in services has contributed to the creation of 50 percent of Canada's new jobs in the past decade, and represents over 72 percent of total employment in Canada.

## How GATS Works

The GATS incorporates mutually agreed-upon contractual rights and obligations, which make the agreement both a code of rules and a forum for negotiating improved trade opportunities and resolving trade differences.





By elaborating the basic rules of conduct for government measures affecting trade in services — before services provoke trade wars — the international trading community is better able to halt protectionism. The GATS makes it possible to:

- prevent new distortions to trade in services
- roll back existing barriers
- safeguard the right to regulate in light of legitimate public policy objectives
- begin developing new rules that will reflect the continuing trend of global economic interdependence.

The GATS structure of rights and obligations rests on three pillars: a framework agreement, sectoral annexes, and specific sectoral commitments on market access and national treatment that are inscribed in national schedules. These are explained below.

The GATS framework sets out general rules governing trade in all service sectors. The framework also sets out rules that apply only if and when a sector has been specifically listed in a member's schedule of commitments. The rules are founded on the principles of market access and national treatment, which are explained below in the context of scheduled commitments.

## Key GATS Provisions

**Coverage:** All service sectors (except “services supplied in the exercise of governmental authority”) and “measures affecting trade in services” taken by any level of government are subject to the framework obligations. This includes federal, provincial or local bodies acting in a regulatory manner on the basis of authority delegated from a government, such as provincial law societies and architects’ associations. Measures covered by the agreement may be laws, regulations, decisions, procedures, administrative actions or any other kind of act by a governmental or regulatory authority.

**Most-favoured nation (MFN) treatment:** Members of the agreement are obligated to treat each other equally well with respect to the conditions their persons or services face in its market. This cornerstone of the multilateral trading system, however, does not require countries that agree to create a free trade area (e.g. the North American Free Trade Agreement or the European Union) to give other GATS members equivalent concessions. Also, members are allowed to take one-time exemptions for specific MFN-inconsistent practices. Special annexes provide for MFN exemptions in financial services, basic telecommunications, and air and maritime transport. Market access to these areas will be negotiated over the next two years.

**National treatment:** Members must give service suppliers and services of member countries the same treatment they give their own service suppliers and their services, if they have scheduled a sector and have not entered reservations for any measures they may have that discriminate against foreign services and service suppliers.

**Transparency:** Members will facilitate clarity and the public availability of domestic laws and other measures by designating “inquiry points,” where service suppliers may obtain information regarding regulations affecting business in that country. This will make it easier for companies to pursue business opportunities.

**Competition rules:** Members will be obligated to take action against anti-competitive behaviour by monopolies that engage in activities outside their monopoly line of business, for example when subsidies related to the monopoly business interfere with competitive activity.

**Licensing and other authorization requirements:** The GATS stipulates that authorizations should be based on objective criteria such as competence; that is, the ability to provide the service concerned. The agreement provides a basis for member countries to work toward recognizing the qualifications of each other’s nationals (e.g. education certificates and practical work experience for individuals, and financial standards for companies).

**Free flow of payments and transfers:** These are subject to balance of payments constraints.

**General exceptions:** Members are exempted from applying GATS rules for reasons of public order, morals and security to protect human, animal or plant life or health, to secure compliance with domestic measures (for example, the protection of privacy), and to deal with certain tax matters.

**Progressive liberalization:** Members are committed to future rounds of negotiations that will further liberalize trade in services. As GATS members gain experience with this relatively new area for trade agreements, future negotiations should improve market access conditions and secure national treatment.

**Dispute settlement:** Multilateral procedures are available for resolving disputes among members.

**Market access:** Members must give service suppliers and services of other member countries access to their markets, if and when they list a sector in their schedule and do not reserve the right to limit market access.

Detailed sectoral annexes deal with issues affecting movement of personnel, financial services, telecommunications, and air and maritime transport.



## Annexes

***Temporary movement of natural persons:*** This annex recognizes the importance of the cross-border movement of “natural persons” (i.e. individuals) for trade in services. At the same time, it makes clear that the GATS does not apply to government measures affecting permanent employment, immigration or citizenship, nor does it apply to individuals seeking access to employment in member countries. The annex outlines how commitments will be negotiated for the provision of services directly by natural persons within foreign markets, leaving the activities to be specified in members’ schedules. This annex is complemented by a ministerial decision to pursue further access negotiations into 1995, including provisions on project-related professionals.

***Financial services:*** Two annexes deal with this service sector. The first annex sets out definitions and detailed rules, including a prudent provision for regulatory security. It contains a special understanding that provides a common approach to making broader and deeper liberalization commitments covering the entire range of financial services. The second annex allows members to take MFN exemptions and modify their schedules without penalty, in light of further negotiations on financial services, for a six-month period after the implementation of the World Trade Organization (WTO).

***Telecommunications:*** This service sector is also the subject of two annexes. The first annex complements existing bilateral and multilateral arrangements with a set of rights and obligations that constitute minimum standards of good regulatory practice in this sector. In particular, it guarantees transparent, reasonable and non-discriminatory access to and use of public telecommunications networks to provide scheduled services (e.g. banking, engineering, computer services and enhanced telecommunications services). The second annex exempts basic telecommunications networks from MFN requirements for the duration of negotiations, which are scheduled to run from May 1994 to April 1996.

***Air transport:*** This annex specifically leaves intact the existing regime of bilateral agreements relating to traffic rights under the Chicago Convention on International Civil Aviation. However, it brings repair and maintenance, marketing and selling, and airline-based computer reservation systems under GATS at this time.

***Maritime transport:*** This annex permits the suspension of the MFN rule for maritime transport and the modification of national schedules, which are under negotiation until June 1996.



The actual liberalization of trade in services is recorded in members' schedules of commitments. Under the GATS, there is no obligation to give market access or national treatment except where a member country has specifically listed a sector in its schedule. A member may, however, attach conditions to these commitments; reservations allow a measure to remain in force even though it would otherwise be inconsistent with GATS' market access or national treatment rules. Schedules represent the outcome of request-offer negotiations among all GATS members. Scheduled commitments represent the minimum access conditions available to all members; that is, the MFN rule applies, subject to the exception for free trade areas. The GATS schedules are legally binding and enforceable under the dispute settlement provisions of the agreement. Only countries submitting a national schedule that has been accepted by other participants in the Uruguay Round negotiations are able to join the GATS at this time.

The schedules lay out in table format, sector by sector, which services a member has agreed will be subject to the GATS rules on market access and national treatment. Unless reservations are entered, market access and national treatment apply automatically. Members may enter reservations in two ways. For measures that apply to all listed sectors (so-called horizontal measures), the reservations are listed at the beginning of the entire schedule. Sector-specific measures to be reserved are referenced in the schedule next to the listed sector, and the information is entered under market access or national treatment, as applicable.

Commitments are further categorized according to the four modes of supply (i.e. the way in which services are traded). These are:

- the cross-border supply of a service (e.g. international telecommunications or transportation)
- the cross-border consumption of a service (e.g. foreign tourism or ship repair)
- commercial presence (e.g. investment)
- the temporary movement of natural persons.

Schedules will indicate for each mode whether a listed service is free of restrictions or subject to remaining reservations.

Market access is defined in the GATS by an exhaustive list of six types of restrictions:

- limits on the number of firms allowed in a market
- limits on the value of transactions or assets foreign firms may have
- mandatory local incorporation
- limits on foreign investment
- two types of economic needs tests.



Measures in the six categories may be maintained only if listed in a national schedule.

The national treatment requirement is stronger than that in the General Agreement on Tariffs and Trade, as the GATS defines national treatment as “equality of competitive opportunity.” The effect is to ban — except where reservations have been entered — all discriminatory governmental practices, whether they are set out in law or occur as a matter of fact.

The schedules of GATS members include extensive commitments — known as “bindings” — against introducing new market access barriers and rolling back some of the existing ones, along with extensive commitments to treat foreign services and services suppliers the way they treat domestic ones.

To ensure that these rights and obligations are respected, as well as to manage future negotiations, member countries have agreed to the creation of specific institutions. The key body for GATS will be the Council on Trade in Services, which will be made up of all members of the WTO. It will have ongoing responsibility for the implementation of the GATS. The GATS also provides for specialized bodies (e.g. a Committee on Financial Services and a Negotiating Group on Basic Telecommunications) to deal with sector-specific issues or carry out negotiations, and for multilateral dispute settlement procedures through the WTO Dispute Settlement Body and its Understanding on Dispute Settlement. The agreement acknowledges the need for linkages to other international bodies (e.g. International Monetary Fund and International Telecommunications Union) to deal with the complexities of the services sector and avoid duplicating efforts.

## Summary of Commitments

***Investment/commercial presence:*** The GATS locks in a dramatic turnaround in attitudes toward, and conditions for, foreign investment around the world. There are extensive bindings by the great majority of developed countries to provide unrestricted market access and national treatment for investments in services. Several key Latin American countries have given similar bindings. Most other developing countries and newly industrialized ones have agreed to allow majority foreign ownership of investments in the services sectors, while a few remaining participants (e.g. several countries in the Association of South East Asian Nations) have bound minority ownership rights.

***Temporary movement of natural persons:*** All developed countries and most key developing ones have given commitments to facilitate the temporary entry for intra-corporate transferees engaged in providing scheduled services, including executives, managers and specialists. Commitments have also been made for "business visitors," or those who come for less than three months to market and negotiate services contracts. A small number of countries, including Canada, have made commitments related to the entry of professionals to complete contracts. Further negotiations, including on project-related contract professionals, will be completed by the end of 1995.

***Financial services:*** All leading developed countries have committed to a higher level of liberalization, although no country has eliminated all its restrictions in this sector. Developing countries have guaranteed some level of market access, combined with a reasonable degree of national treatment. Members will continue to negotiate commitments related to financial services for up to six months after the WTO is in force, with a view to improving the overall quality of commitments.

***Telecommunications:*** Developed countries have guaranteed open access to enhanced services, while most developing countries have offered to open up access to some parts of the sector (e.g. electronic mail, voice mail and on-line information services). For basic services, there are few commitments, but a dozen major countries have agreed to pursue negotiations in this area until April 1996.



***Business services*** (e.g. computer and software services, environmental services, distribution and leasing, market research and consulting): Developed countries are guaranteeing open access and equal treatment in most areas, while most developing countries have agreed to open up access for a number of business services.

***Professional services*** (e.g. accounting, architecture, engineering and legal): Members for the most part have committed to bind existing licensing and accreditation regimes, ensuring no increase in discriminatory measures. They have also agreed to pursue negotiations on mutual recognition and harmonization of professional, technical and licensing standards, beginning with accountancy services.

***Air transport:*** Members have made only limited commitments in one or more of the areas of repair and maintenance services, marketing and selling, and airline-based computer reservation systems.

***Maritime transport:*** Members have agreed to further negotiations, particularly in international shipping, auxiliary services and the use of port-and-onward transportation facilities.

***Surface transport:*** Some members have given binding commitments not to increase restrictions on road and rail transport.



## What Remains to Be Done?

The GATS provides for progressive liberalization; it is a starting point. Members have agreed to launch early negotiations on commitments regarding the movement of natural persons, financial services, basic telecommunications and maritime transport.

They have also agreed to pursue negotiations, after entry into force of the WTO, on:

- trade in services and the environment
- the application of emergency safeguards
- the liberalization of government procurement of services
- the removal of trade-distorting subsidies for services industries
- reciprocal recognition of professional standards and acceptance of the qualifications of professionals, starting with accountants.

Further negotiations on market access and national treatment may be started at five-year intervals. The elimination of current MFN exemptions will likely be addressed during such rounds.



## How Does Canada Benefit?

Many elements of the GATS were based on Canadian proposals and drafts, so it is not surprising that the outcome should correspond largely to Canada's objectives in the negotiations.

Canada's goal has been to obtain as much access to world markets as possible for competitive Canadian producers and investors and to secure that access by means of clear, mutually agreed and fairly administered rules. In return, Canada was prepared to open its own market to a similar degree, to the benefit of Canadian companies and consumers who would gain access to capital, goods and services in greater variety and at competitive world prices. The GATS benefits Canadian industrial users by increasing availability of internationally competitive Canadian and foreign service inputs, and benefits Canadian consumers by lowering prices and improving choice and quality.

Canada has traditionally depended on foreign investment for its economic growth, but Canadians increasingly are becoming significant foreign investors in their own right. Accordingly, while recognizing that national governments have an important domestic policy role to play in influencing the direction of investment in their countries, Canada supports the liberalization of international investment. Although Canada has given all GATS members commitments regarding foreign investment that are on par with those granted to its partners in the North American Free Trade Agreement, Canada has nevertheless retained the right to review major takeovers and to restrict investment in key sectors, such as energy and culture.

It is difficult to quantify the economic gains from the GATS because it is difficult to measure services. However, the GATS will likely affect trade in services in much the same way that the General Agreement on Tariffs and Trade affected trade in goods, which has underpinned world economic growth for almost 50 years.

All regions of Canada have export interests and need access to world-class services inputs. Therefore, all regions are expected to benefit from the GATS.

Because of the MFN rule, Canadian firms will normally obtain the benefits of any future liberalization measures undertaken by other GATS members. Should any GATS member further liberalize market access restrictions, the MFN rule automatically provides to all other GATS members the privileges of that liberalization.

Moreover, the requirement that all scheduled commitments on national treatment and market access apply on an MFN basis opens up many new areas where Canadian suppliers of services will receive the same treatment as their competitors. This will ensure that they can invest and compete on an equal and secure footing in markets that were previously closed or discriminatory.





